

PTFY - PHYS THERAPY - 1ST YEAR (PTFY)

PTFY 4150 Physiology I - Fnd Hum Physio (2 Credits)

This course presents human physiology for the analysis of normal function and adaptive/restorative function available in the presence of health affecting the skeletal, connective tissue, muscular, integumentary, nervous, and other biological systems. Information will be presented at the tissue, organ and system level.

PTFY 4160 Kinesiology I - Bio Hum Motion (2 Credits)

This course presents the application of basic principles of physics, anatomy, and physiology to understand human movement. The development and function of the musculoskeletal system (bone, muscle, and ligaments), the mechanical behavior of these biological tissues, the external/internal forces that contribute to normal motion provides the groundwork for understanding, describing and analyzing the biomechanics of human motion.

PTFY 4170 Crit Think - Clin Reason Proc (1 Credit)

This course introduces the student to the cognitive strategies and processes utilized to (1) collect and interpret information needed to understand a patient's problem/situation, (2) plan and implement appropriate interventions, (3) evaluate the outcomes and (4) reflect on the effectiveness of the reasoning process. Basic clinical and critical reasoning models in the context of patient centered health care and working in a healthcare team is emphasized.

PTFY 4180 Prof Roles in Physical Therapy (3 Credits)

The course introduces the student to the physical therapy profession. Five themes of professional practice are explored; the physical therapist as clinician, consumer of research, inter-professional care provider, lifelong learner and educator. Foundational skills in written and oral communication, professional values and behaviors, population-specific differences, utilization of healthcare informatics and evidenced-based practice are presented.

PTFY 4240 Therapeutic Interventions I (2 Credits)

This course introduces the student to the application of physical therapy intervention skills as part of the treatment process. Emphasis is placed on developing skills in fundamental patient care. Students will be introduced to basic manual therapy techniques, therapeutic exercise, and functional training to achieve patient/client goals & outcomes that address problems resulting from evaluation of the movement system.

PTFY 4250 Human Physiology II (2 Credits)

This course examines the concepts of pathophysiology and the mechanisms of change that contribute to the genesis of a diseased state. Common diseases and disorders are covered and clinical laboratory measurements and values used in differential diagnosis will be presented from a systems perspective. Clinical cases will be used to present standard patterns of clinical examination, evaluation, diagnosis, prognosis, intervention and communication/referral with other health care practitioners. Discussions will address changes in response to disease or trauma across the lifespan.

PTFY 4260 Kinesiology II (3 Credits)

This course builds knowledge and skills in application of biomechanical principles relative to human motion through regional analysis of body segments. Attention is paid to synovial joints as key linkage in the human mechanical system and how their movements are created and governed. The laboratory component of this course reviews individual joint structure and its application to segmental and overall body movement.

PTFY 4270 Human Anatomy (5 Credits)

This cadaveric-based human anatomy course is designed to develop knowledge concerning structural and functional regional gross human anatomy. The course focuses on the clinical application of anatomical concepts in both lectures and laboratory sessions. Structured laboratory sessions also incorporate the use of models, medical terminology and palpation of key anatomical structures. The course utilizes case-based vignettes to promote critical thinking and allow students to apply theory to a clinical population.

PTFY 4280 Clin Assessment - Diag Skl I (3 Credits)

The course facilitates skills acquisition in basic elements of patient examination and professional physical therapy practice. Emphasis is placed on elementary physical therapy examination of the non- medically complex patient. This includes systems screening, selection and performance of basic tests and measures for function, the integumentary, cardiovascular – pulmonary and musculoskeletal systems, interpretation and evaluation of examination findings, differential diagnosis, development of an individualized plan of care, appropriate referrals and effective communication of patient/client information.

PTFY 4290 Critical Inquiry I (2 Credits)

This course is designed to provide students with a working knowledge of the evidence-based research process and its importance in the practice of physical therapy. Students will learn about the variety of research publications and apply the critical appraisal process to the literature.

PTFY 4330 Neuroscience (3 Credits)

This course will cover the basic structure, organization, and function of the central nervous system (CNS). Learning experiences focus on understanding the localization of function within specific structures and pathways of the brain and spinal cord, and typical syndromes associated with vascular accidents, trauma or diseases of the various parts of the CNS.

PTFY 4340 Therapeutic Interventions II (3 Credits)

This course promotes the development of clinical skills related to functional mobility and movement in the home and community including transfers, ambulation, and use of wheelchairs and assistive devices for locomotion and various other activities of daily living (ADL). Therapeutic exercise interventions will be utilized to achieve patient/client goals & outcomes that address problems resulting from evaluation of the movement system.

PTFY 4350 Physiology III - Bioenergetics (2 Credits)

This course presents both the normal and pathological human body responses to physiological conditions and processes in relationship to their influence on human movement including the nutritional and metabolic mechanisms in relation to movement & functional activities. Included are the study of muscle physiology, metabolism, cardiovascular and respiratory adaptations, aging, thermoregulation, aerobic and anaerobic training exercise prescription, and use of ergogenic aides. Topics will focus on evaluation and management for a healthy population as well as for those with chronic diseases and disabilities.

PTFY 4360 Kinesiology III - Posture Gait (3 Credits)

This course provides continued instruction in the study of human movement with regards to posture, balance and gait. The neuromuscular and musculoskeletal mechanisms involved in the development, maintenance and adaptations of posture, balance, and walking will be presented. Students will participate in the assessment of normal and deviated walking, balance and posture including identification of compensatory mechanisms.

PTFY 4370 Comm Htlh-Wellness Outreach I (1 Credit)

This course offers experiential learning in community Health and Wellness outreach while increasing students' awareness of practice settings and offers opportunities for interprofessional collaboration. The course will focus on community assessment utilizing Health/Wellness screening tools appropriate for target populations

PTFY 4380 Clin Assessment Diag Skl II (3 Credits)

This course promotes skill acquisition in elements of physical therapy services and professional practice with an emphasis on physical therapy examination, including systems screening of the medically complex, but hemodynamically stable, patient, with a focus on the neurological and musculoskeletal systems including the extremities, trunk and spine and their relationship to posture, balance and gait. Included are the selection and performance of appropriate tests and measures, interpretation and evaluation of examination findings including differential diagnosis, clinical decision making in the establishment of an individualized plan of care to restore normal movement and functional mobility, referrals and effective communication of patient/client information.

PTFY 4390 Critical Inquiry II (2 Credits)

This course is a continuation of Critical Inquiry I and includes experimental and non-experimental research designs, methodology and statistical concepts. Students will continue to search for evidence and critically appraise it specifically for application to clinical diagnosis, prognosis and treatment effectiveness. Students develop the skills needed to ask and answer clinical questions using best evidence and practice using sample data and statistical software.